

CLAIMS

1. A method for providing a fault-tolerant remote controlled computing device, the method comprising:

executing a multi-tasking operating system and at least one primary

5 process on the computing device;

determining with a first monitor process whether any primary

process is in a fault state; and

in response to any primary process being in a fault state, resolving

the fault state of each such primary process.

10 2. The method of claim 1, further comprising:

determining with a second monitor process whether the first monitor

process is in a fault state; and

in response to the first monitor process being in a fault state,

resolving the fault state of the first monitor process.

15 3. The method of claim 2, wherein the operating system monitors the second monitor process and re-starts the second monitor process when the second monitor process is in a fault state.

4. The method of claim 1, wherein determining comprises:

polling the operating system whether each primary process is

20 executing; and

determining, based on a response from the operating system,

whether each primary process is executing.

5. The method of claim 1, wherein each primary process is configured to periodically record logging information to a common log file and wherein determining comprises:

5 accessing the common log file for logging information associated
 with each primary process; and
 determining, based on the logging information, whether each
 primary process is in a fault state.

6. The method of claim 1, wherein resolving comprises:
10 identifying each primary process which is in a fault state; and
 re-starting execution of each identified primary process.

7. The method of claim 1, wherein resolving comprises:
 identifying each primary process which is in a fault state;
 determining whether each identified primary process can be re-
 started; and
15 in response to each identified primary process not being re-
 startable, terminating one or more executing primary
 processes and starting execution of one or more stable
 default processes.

8. A method for providing an autonomous multimedia computing
20 device, the method comprising:

 storing a local copy of a common configuration file and multimedia
 content on the computing device;
 polling a server at pre-determined time intervals via a public Internet
 connection for updates to one or more processes, the local

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copy of the common configuration file, and the multimedia content;

in response to updates being available from the server,

downloading one or more updates via a fault-tolerant

5 network connection; and

playing the multimedia content based on instructions contained

within the local copy of the central configuration file.

9. The method of claim 8, wherein storing comprises saving the local copy of a common configuration file and multimedia content to a storage device
10 integrated with the computing device.

10. The method of claim 8, wherein polling comprises:
connecting to a server from within a firewall.

11. The method of claim 8, wherein polling comprises:
connecting to a server via a fault-prone network connection.

12. The method of claim 8, wherein polling further comprises:
reporting display statistics associated with the multimedia content.

13. The method of claim 8, wherein downloading comprises:
streaming one or more updates to the computing device prior to
allowing access to the updates.

14. The method of claim 8, wherein the local copy of the common
20 configuration file is in eXtensible Markup Language (XML) format.

15. The method of claim 8, wherein the fault-tolerant network connection comprises a network connection which allows downloading of a file to resume once a broken network connection is re-established.

16. The method of claim 8, wherein the multimedia content comprises
5 interactive content allowing a user to interact with the computing device.

17. A method for providing a user-defined notification system for tracking status parameters associated with a plurality of computing devices, the method comprising:

10 storing a user-defined event comprising one or more status parameters which are common among the plurality of computing devices;

storing an address to receive a notification when each one of the status parameters satisfy threshold values defined within the user-defined event;

15 receiving reports of status parameters from the plurality of computing devices at pre-determined time intervals;

determining whether the reported status parameters satisfy a user-defined event; and

in response to the user-defined event being satisfied, sending a
20 notification to the stored address.

18. The method of claim 17, further comprising:
associating the user-defined event with a frequency parameter to define an escalation level;

associating one or more escalation addresses with the escalation
level;

tabulating the frequency parameter when the user-defined event
associated with the escalation level is satisfied; and

5 in response to the escalation level being satisfied, sending a
notification to each of the escalation addresses.

19. The method of claim 17, wherein sending the notification comprises
sending the notification via a messaging protocol that corresponds to the stored
address.

10 20. The method of claim 17, wherein the notification comprises an
email message.